

THE MARIN BEEK NEWS

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June 2015

What's the Buzz?

Our next meeting will be on Thursday June 4, 2015 at the American Legion Log Cabin, 20 Veterans Place, San Anselmo, CA starting at 7:30 pm. The meeting will feature Mark Winston, PhD, Academic Director and Fellow of the Centre for Dialogue, Simon Fraser University, Vancouver, BC.

His talk is titled "Bee Time: Lessons From the Hive": There are powerful lessons to be learned from bees about how we humans can better understand our place in nature, engage the people and events surrounding us with greater focus and clarity, interact more effectively in our relationships and communities, and open ourselves to a deeper understanding of who we are as individuals, communities and a species. He will talk about his experiences over 30 years of walking into apiaries, and the lessons learned from a life spent among the bees.

Dr. Winston's book, *The Biology of the Honey Bee* published by Harvard University Press, remains the standard reference book. His new book, *Bee Time: Lessons from the Hive*, will be made available for purchase and signing at the meeting by Whyte's Booksmith.

Upcoming Meetings:

July

No meeting (Marin County Fair)

August 8, 2015

Annual Marin Beekeepers Potluck

What You Missed

Our last meeting featured a presentation by Marla Spivak, PhD, Distinguished Knight University Professor at the University of Minnesota and the recipient of a MacArthur "genius" fellowship. Her lab is focused on how bees can stay "on their own six feet". Among her many projects, she has demonstrated hygienic genetic traits by developing a line of bees and shown the antibiotic use of propolis in the hive.

The title of Dr. Spivak's talk was "Ratchet, Hatchet, Pivot" -- observations about bees and beekeepers in the big picture to open a dialogue with the audience.

Dr. Spivak began her talk discussing a book titled "The Big Ratchet – How Humanity Thrives in the Face of Natural Crisis", written by Ruth Defries. The book discusses periods throughout history where things would ratchet up. She gave the age of dinosaurs as an example. Then, what she calls "The Hatchet" occurs. The dinosaurs are wiped out by a catastrophic event. Then, what she calls "The Pivot" occurs. Space is made for other species to grow and develop.

As Dr. Spivak read the book she started to think about how this same phenomenon applies to bees. She looked at the green revolution "The Ratchet" which

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was started in the 1940s by Norman Borlaug, a plant breeder, whose goal was to develop wheat that would grow easily in order to feed the increasing population. The ratchet is that intense crop production has produced monocultures, such as corn, soy beans and almonds. It also led to an increase in the demand for insect pollination. In order to keep up with demand beekeepers artificially stimulate bees so that they are ready when the various crops bloom. Monocultures also led to increased use of insecticides as well as herbicides that are sprayed to get rid of the "weeds".

"The Hatchet", bees have been in decline since World War II when we changed our agricultural practice. The varroa mites came along in the 1980s. The varroa mites were treated with synthetic chemicals, which have created resistant mites. In 2006-2007 something more than varroa came along. It was called Colony Collapse Disorder (CCD), but the scientific community didn't really know what it was.

Currently, it is thought that there are multiple interacting causes for the decline of pollinators:

- Varroa mites – mites vector various bee diseases and weaken the bees' immune system.
- Pesticides – increased use of pesticides creates increased exposure for pollinators
- Monocultures – create areas where little or no nutrition is available to the pollinators, who require a diverse diet.
- Loss of forage – wildflowers are frequently destroyed since they take up valuable crop space but they also provide the variety of nutrition that pollinators need.
- Destruction of nesting sites – many pollinators are ground dwelling. Without access to nesting sites they are unable to reproduce.

"The Pivot", it has started with public awareness. Honey bees have recently been on the cover of Time Magazine. There is more awareness of the diversity of native bees; over 3600 different kinds of native bees can be found in the United States.

There is a cultural revolution in thinking about landscapes in certain areas. One of Dr. Spivak's graduate students is studying the possibility of planting flowering plants that can tolerate mowing but still produce flowers into lawns. This would make lawns into a nutritional resource for pollinators.

Certain states in the mid-west are encouraging farmers to plant buffer strips of native flowering plants adjacent to the crops providing a food source for pollinators and possibly increasing crop yields by attracting more

native pollinators. They are discovering that buffer strips produce a variety of benefits. They help to control erosion, attract beneficial insects that control crop pests, and they attract song birds and game birds.

Researchers are finding that nutrition is a key element in bee health. Good nutrition helps them break down pesticides in their bodies and also builds up their immune system.

Dr. Spivak closed by stating that we need to find new ways to fight varroa. If left unchecked varroa will kill a hive within two years. She talked about herd immunity, as more members of the herd are vaccinated the spread of viruses is contained. Herd immunity can be applied to bees also. If only some colonies in an area are treated the varroa and viruses spread. If most are treated then varroa is contained.

An alternative to treatment is through breeding for survival. If infested colonies in an area die off and few colonies are introduced or allowed to develop high mite levels then the spread of varroa can be contained. She said it would probably take at least five years for a local breeding program without mite treatments to become effective.

Beekeeping Classes

Summer and Fall Hive Management class series (9 hours, \$99; Drop in for classroom sessions only = \$25/each session) with Bonnie and Gary Morse

Classroom sessions: Wed. 7/8 - 7/22, 6:30pm - 8:30pm, 3 classes, course code 24049, San Rafael Community Center, 618 B St., San Rafael
Field Day: Sat. 8/8, 9:00am - 12:00pm, location TBD, tent. San Geronimo

Late summer can bring a variety of problems including increasing mite counts, yellow jacket attacks and lack of forage. Learn to identify the signs and symptoms and how you can assist the colony during difficult times. Your bees have already started getting ready for winter and so should you: how and when to reduce colony size, determining how much honey to remove, how to extract the honey and more. Field day will include sugar rolls for mite testing, identifying food stores & colony needs, and how to "read" your monitoring board.

Additional information and registration available through the [San Rafael Community Center](#)

Hive Tips

By Bonnie Morse, [Bonnie Bee & Company](#)

The flow (nectar and pollen) has slowed considerably in the last few weeks. The effect this has on a hive will vary considerably based on location and each individual colony. Overwintered colonies that may have had excess stores coming out of winter in addition to being able to take advantage of early spring conditions may be in a better food storage position than new spring nucs, splits and packages. Colonies in southern Marin and north along the 101 corridor tend to have more forage available at this time of year than northern Marin and areas west of (and including) San Anselmo.

When inspecting your hive(s), be on the lookout for stored pollen (bee bread), nectar, and capped honey. Is it there? Great. Not? Consider feeding. It may seem early in the season to do so, but lack of March & April rains are causing an earlier summer dearth than is usual. Also, with the increase in popularity of beekeeping, there are simply a lot more bees that need food. Be mindful that feeding can have unintended consequences of attracting ants and/or robbing and mitigate as needed.

Reduction in pollen availability can lead to reduction or stopping of brood production. If you don't see eggs/larvae when inspecting your hive(s), check to see if pollen (bee bread) resources are present. If not, lack of brood may be related to lack of food as opposed to the colony being queenless

Robbing has been reported already in weaker colonies in areas with a recent considerable slowdown in nectar availability. If you have a smaller colony, keep an eye out and perhaps consider reducing the entrance (if you haven't done so already) to help make it easier for the colony to protect itself.

Defensive behavior

Many factors can cause defensive behavior in bees. If you wonder why your sweet girls have suddenly gone Cujo on you, consider these possible reasons:

- 1) **Hunger.** If they have little or no food, you might not find them amenable to your visit. That temperament can turn around quickly if you come bearing food.
- 2) **Sick.** When you feel lousy, you might get a little cranky. Same can happen with your bees.
- 3) **Rearranging their house...** potentially not in a manner pleasing to them. Unless you have a good reason to do so otherwise, leave the frames in the order (and direction) that the bees have set them

up. It is especially important to leave the brood together in the center of the cluster.

- 4) **Attacks by ants, yellowjackets, other bees, or visits by skunks or other critters.**
- 5) **Your rough manipulation of the hive** (potentially resulting in queen injury or death)
- 6) **Queenless.** While a queenless colony may be more prone to "queenless roar" and more fanning when opened, they may also be a little more defensive.
- 7) **Colony with new, unmated queen.** This can be a perilous time. If the new queen does not successfully return from a mating flight and start to lay fertilized eggs, the hive could be doomed (without your intervention). Colonies in this transitional stage have been known to be more agitated.
- 8) **Strong odors.** The end of the long day of gardening in the hot sun may not be the best time for a hive inspection. The morning after a late night out including a lot of alcohol might not be either.

If excessive defensive behavior with your bees is causing problems in your yard – or with your neighbors – you might need to consider other options. Don't be afraid to ask for help if you aren't sure what to do. Since you're reading this, you are subscribed to the Buzz. Use it if you need to...that's what it's there for!

Dryvert Sugar

Once again club member Diane Greenberg will be organizing an order for dryvert sugar for beekeepers that use dryvert as a supplemental feed through the winter months. The order will occur on Friday July 10, all orders **MUST** be in and paid for by July 3. The price is \$38.50 for a 50 lb. bag payable to: Diane Greenberg
2204 Laguna Vista Dr.
Novato, CA 94945
To order contact Diane directly at keener58@hotmail.com.

Diane will be away the month of June and available via email only. All sugar must be picked up either at the bakery on July 11 (work it out with your schedule or friends) OR, she is looking for 2 locations in Marin (maybe southern or central and northern), for others to get their sugar **THAT WEEKEND, PLEASE**. Contact Diane if you want to volunteer your home or truck. Thanks Diane for organizing the dryvert purchase!

Candle Action



The Final Dip

Sunday May 31st found a dozen Marin Beekeepers huddled around a simmering cauldron of water at Draper Farms. No - it was not a crab feed. The purpose of the gathering was to learn the age-old skill of hand dipping beeswax candles. Anna Gravely guided us on our journey, demonstrating the key steps and coaching us to “learn to do by doing”.

High”lights”

- cover up – the floor & yourself
- size matters ... of the wick, that is
- liquid wax is hot
- patience is a virtue
- once you're set up, it's not that hard!

In the end, 13 pairs of candles were created – and the competition at the Marin County Fair is looking very bright!

Many thanks to Anna for leading the class, to Jerome, Bonnie & Dave for the wax and to the Drapers for their warm hospitality.



Ready for the Fair

Fair News

The **2015 Marin County Fair** is fast approaching. The official Fair entry form deadline is 14 May 2015. If you entered last year you should have received an entry package by now. If not, or if you are entering for the first time, there are entry forms and the 10 category descriptions for the Adult Honey Department on the Fair website, under Competitive Exhibits.

<http://www.marinfair.org/2015/competitive-exhibits/adult-exhibit-information>

Entry forms are available at

<http://www.marinfair.org/~media/files/fair/2015/contest/2015-entry-form.pdf?la=en>

Please don't be shy, enter as many categories as you wish. Exhibits will be received over 2 days at the Exhibit Hall at the back of the Fair Grounds. **Friday, June 12, 3 pm to 7 pm & Saturday, June 13, 10 am to 5 pm, Exhibit Hall.**

This is an opportunity for all of us to participate in a little good-hearted competition with other beekeepers on all types of hive products: honey, beeswax, and candles. Cash prizes are associated with the first 5 places. There are two big prizes, the Best of Show and the Barney Salvisberg Award, a founding member of Marin Beekeepers. Again, this year each will have additional monetary awards. All the exhibits are on prominent display at the bee booth during the fair (ribbons included) for your friends and neighbors to see, and we can showcase the many different hive products produced locally in Marin. There is still time to assemble and get your entries in.

Next up is staffing the bee booth inside the exhibit hall

during the Fair which this year is from **Wednesday July 1st to Sunday July 5th**. This is our club's opportunity to do outreach and get the word out about our little "trusts" and hopefully dispel some misinformation. We get to talk about bees, show off the observation hive (a fresh one every day), look for the queen and enjoy the various reactions. Even as a "newbie" you have more knowledge than most of the public. The club also gets paid from the Fair to help continue our excellent list of speakers.

We staff the bee booth with 2 people during each 3- to 4-hour time slot. In exchange, each staffer receives a pass to get into the Fair and each time slot will have one car pass to the exhibitors' parking lot in back of the exhibit hall. The rest of the day you can enjoy the other parts of the Fair. Check out the entertainment at the web site <http://www.marinfair.org/2015/concerts> (included with entry), special events and attractions, especially the fireworks display each night at 9:30 p.m. The sign-up schedule to man our booth was sent out via the BUZZ. To sign up for a time slot email Dan Stralka with your preferences. Stralka.daniel@epa.gov Please sign up and join in the fun!

The important dates are:

May 14

Entry forms due in with this year's entry fee of \$2.50 per entry.

June 12 and 13

Drop off exhibits in the Fair building at the back of the Fairgrounds

Friday, June 12: 3:00 to 7:00 p.m.

Saturday, June 13: 10:00 a.m. to 5:00 p.m.

We can accept late entries even if you hadn't submitted a form. Fill out the forms before you come to expedite the processing.

June 14

Judging by Chef Frank Villa, Executive Chef at Marinitas in San Anselmo.

June 22

Finalize Bee Booth sign-up.

July 1 to 5

MARIN COUNTY FAIR!

July 7

Entry retrieval and collection of awards.

UC Davis Bee Symposium

A group of Marin Beeks made the trek to Davis on Saturday May 9th for the first annual Bee Symposium. The Bee Symposium was actually a continuation of the Bee Symposiums that Doug Vincent of BeeKind in Sebastopol used to host annually. Noted bee researchers and experts from around the country made presentations to a packed auditorium on a variety of bee related subjects.

The day long symposium culminated with a reception at the Haagen-Dazs Honey Bee Haven located next to the Harry H. Laidlaw Jr Honey Bee Research Facility.



Looking at Native Bees with Dr. Robbin Thorp